



GEOGRAPHY EDUCATORS' NETWORK OF INDIANA

NEWSLETTER

Volume 104, Issue 4

Fall, 2004

Inside this issue:

Competitions/Awards	2,4
Educator opportunities	1,3,5
Events	1-5
Featured Geographer	7
Lesson Plans	8-14
Resources	15

FALL GEOFEST

Join us for another great annual fall event. Our host site this year is the wonderful Spring Mill State Park and the Spring Mill Inn, providing for a super geography experience. Hot themes this year include the 2004 Geography Awareness Week Theme: World Cultures. Back by popular demand is the Saturday morning orienteering experience and an afternoon GPS field experience. Additional sessions include another field experience examining karst topography and the local environment of Spring Mill. We will kick off the event with a keynote speaker Friday evening, followed by the

annual night hike. Participants will be provided handouts for each session including detailed listings of the standards covered by each session.

For a registration fee of \$45 for GENI members and \$60 for non-members (includes a 1-year GENI membership), you will be provided with Friday lodging, breakfast, lunch and snacks on Saturday, and great classroom handouts. Space is limited so get your registration in early! See pg. 6.



Summer Urban Institute Participants Explore Indianapolis

It was a whirlwind tour around the Indianapolis area for participants of GENI's Urban Institute in July. After being welcomed by staff and introductions made around the room, they hit the ground running with the history of the origination of Indianapolis and a classroom GIS application. This was just the first of many activities that helped these educators understand urban geography concepts and apply them to Indianapolis.

Through a multitude of guest presenters, they dove into the vast stages of immigration and cultural changes the city has gone through. Some of these topics included German, Eastern European, African American, Latino/a, and Jewish immigration. The Max Kade German-American Center at the Deutsche Haus-



Josefa Crowe with the Historic Landmarks Foundation of Indiana gives tour.

(Continued on page 2)

Special Points of Interest:

- 2005 National Geographic Bee Registration
- Geography Action: Cultural Connections
- GeoFest 2004-Spring Mill State Park
- Gil Grosvenor of the National Geographic receives Presidential Medal of Freedom

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Calendar of Events:

- Aug. 28—**GENI Advance Board Meeting** to be held at IUPUI; 8:30am-3:00pm. All are welcome to attend.
- Early Oct.—Geography Action workshop at Northview Middle School, Washington Township, Indianapolis. This will include demonstrations of classroom activities and resources. Contact the GENI office for details.
- Oct. 8-9 – GENI's annual **Fall GEOFEST 2004** to be held at Spring Mill State Park; 5:30 pm. Friday until 4:00 pm. Saturday. See details and registration form in this newsletter.
- Oct. 15 - Deadline for 2004 **National Geographic Bee** school registration. Principal must send a letter to the National Geographic Bee, National Geographic Society, 1145 17th Street NW, Washington DC 20036-4688. (202)-828-6659
- Oct. 20—Introductory evening workshop for **Capitol Forum** teachers at the Indiana Historical Society. Contact Julie Patterson, Project Coordinator, at 812-855-1638 or judpatte@indiana.edu for more information. See related feature in this newsletter.
- Oct. 20-23 – **2004 National Council for Geographic Education** annual conference to be held in Kansas City, Missouri. Contact the NCGE at (724)357-6290 or visit www.ncge.org for additional details.
- Oct. 25-26 – **Indiana Non-Public Education Association** will hold its biennial conference at the Indiana Convention Center in Indianapolis. Visit www.inpea.org/inpec.asp for more information.
- Nov. 4-7 - The 2004 **Indiana International Festival** to be held at the State Fairgrounds. Highlights: Cultural displays, non-stop entertainment, ethnic foods and global bazaar. For more information, contact Pat Hubley at the Indiana International Center at (317)236-6515x106, <http://www.indyinternationalfestival.org>. Student & group rates.
- Nov. 16-22 – **GEOGRAPHY ACTION! - GEOGRAPHY AWARENESS WEEK** "Cultural Connections 2004". Remember that only paid GENI members will receive a GENI GAW Newsletter including resources provided by the National Geographic. We will also be hosting GA workshops around the state. Dates and locations to be announced. Also, visit the National Geographic site for great ideas and lesson plans. www.nationalgeographic.com/geographyaction.
- Nov. 19 - The fifth annual **National GIS Day**. Watch the GENI website for additional information and event dates. Also visit www.gisday.com.
- Dec. 3-4 - GENI will host its **Strategic Planning Board Meeting** on Friday evening and Saturday in Indianapolis, contact Jill Bowman for attendance information at (317)842-8039.
- Feb. 2-4 - The **Hoosier Association of Science Teachers, Inc.** annual conference will be held at the Indiana Convention Center; contact Edward Frazier, Executive Director of HASTI at 5007 West 14th Street, Indianapolis IN 46224, (317)243-0107, elfrazier@comcast.net, www.hasti.org/convention.html for further details.
- March 5 - **GENI Annual Board Meeting** to be held at IUPUI's Cavanaugh Hall #438 from 8:30 a.m. - 1:00 p.m. All are welcome to attend!

(Continued from page 1...)

Athenaeum hosted a field experience for the group sharing its research of the German diaspora to America and its effect on American culture and society. The Islamic Society of North America in Plainfield also welcomed the participants and provided scholars to share information on Islamic life and influence in Indianapolis.

To add to the cultural experience for the week, they were treated to some traditional dining, including, German, Peruvian, Ethiopian, and Scottish meals. In wrapping up the week, Suzanne Stanis with the Historic Landmarks Foundation of Indiana introduced the teachers to Historic Architecture and took them on a tour of some historic museums and the Lockerbie Square Historic District.

It was an enthusiastic group, eager to gain new knowledge to share with their students. GENI would like to thank all of the guest presenters: Dr. Giles Hoyt (Max Kade German-American Society), Dr. SuAnn Youanovic (Holy Trinity), Ophelia

Wellington (Freetown Village), Dr. Gerardo Lopez (IU Dept. of Education), Charles Huppert (Canal Society of Indiana), Max Nelson (Jewish businessman), Suzanne Stanis (Historic Landmarks Foundation). And a special thanks goes out to our lead staff of Will Sibley (Ben Davis Junior High) and Dr. Owen Dwyer (IUPUI Geography Department) for all of their contributions to make a successful event!



Participants visit the Islamic Society of North America in Plainfield.



Geography Action!/Geography Awareness Week 2004

Geography Action!, an educational outreach program of the National Geographic Education Foundation, engages students and educators in learning about and taking action to protect the Earth and its people. Each year features a new topic and —through partnerships, education activities, and community involvement—the program issues a call to action to encourage individual and community-based service.

The year-long program builds on Geography Awareness Week, the third week in November, which began in 1987 as a congressionally-mandated week highlighting geography education in our nation's schools. Each year *Geography Action!* reaches more than 70 million people with its message: Geography is relevant to their daily lives. The theme this year is "Cultural Connections."

The rapid pace of globalization is changing the context of our daily lives and redrawing our sense of boundaries. It has never been more important for young people

to understand our global society. Worldwide, there are thousands of different, distinct cultures—behaviors and customs that provide continuity and sense of community from one generation to the next. *Geography Action!* 2004 will focus on cultural aspects of daily life in several countries, such as food, clothing, oral traditions (e.g., story-telling and music), and recreation. The program will promote understanding and respecting differences between cultures, and emphasize the similarities that people share.

GENI's next newsletter will be dedicated to *Geography Action!* and Geography Awareness Week. All paid members will receive this mailing which will include a copy of the posters and other printed materials from the National Geographic. Take a look at the NGS site (www.nationalgeographic.com/geographyaction) for resources. This site features sections for both educators and kids.

Source: National Geographic Website



National Geographic Society Chairman Receives Prestigious Award

Mr. Gilbert Grosvenor, Chairman of the Board of the National Geographic Society, received the Presidential Medal of Freedom in a ceremony at the White House on June 23rd. The Medal is America's highest civilian honor, the equivalent of the military Medal of Honor in times of war, and recognizes service in different areas. He is honored for his excellent service in geography education, among other achievements in support of research and exploration. 2004 marks Mr. Grosvenor's 50th anniversary with the National Geographic. He was the founder of the national alliance network and has worked tirelessly since 1985 to assist teachers in their efforts to educate students in the vitally important subject of geography.

The President's remarks June 23:

On a January night in 1888, a group of men, meeting not far from the White House, founded the National Geographic Society. In the years since, the society has flourished, thanks, in large part, to a family named Grosvenor. Gilbert Melville Grosvenor is the fifth generation of his family to hold the title, President of the Society. As Chairman of the Society's Board of Trustees, and earlier as NGS President, he has maintained the excellent standards and reputation that we rightly associate with the National Geographic.

Gil has also furthered the Society's mission of protecting land and wildlife, teaching young people about geography and instilling in readers a respect for other cultures and nations of the world. We honor him today for his good stewardship of a great American institution.

The 13 distinguished individuals honored by President Bush were Robert L. Bartley, Edward W. Brooke, Doris Day, Vartan Gregorian, Gilbert M. Grosvenor, Gordon B. Hinckley, His Holiness Pope John Paul II, Estee Lauder, Rita Moreno, Arnold Palmer, Arnall Patz, Norman Podhoretz, and Walter B. Wriston.

Grosvenor plans to permanently display his Presidential Medal of Freedom at National Geographic Headquarters in downtown Washington, D.C. In a note to the staff he said, "I wish to share this award with each and every employee—both active and retired. From the day I reported to work on June 21, 1954, under the leadership of then President John Oliver LaGorce, I have enjoyed a wonderful relationship with the Geographic family of associates. Each of you earned a piece of this medal -our medal- so I intend to display it at an appropriate location at headquarters so you have the opportunity to gaze at it, to reflect upon your own contributions and to revel in the satisfaction and pride of contributing to one of America's most admired icons."

Source: National Geographic Society

GEOGRAPHY BEE 2005—GET REGISTERED NOW!

Each year, thousands of schools in the United States participate in the National Geographic Bee using materials prepared by the National Geographic Society. The contest is designed to encourage teachers to include geography in their classrooms, spark student interest in the subject, and increase public awareness about geography.

If you have students in fourth, fifth, sixth, seventh, or eighth grade, enter your school for the 2005 National Geographic Bee. Give your students a chance to compete for substantial college scholarships! It is easy and inexpensive. All it takes is one teacher to oversee the competition and a minimal registration fee. If school funding is not available, PFO's and often individual parents are willing to cover the registration fee. See details below from the National Geographic.

HOW TO REGISTER:

Principals of schools in the U.S. with any of the grades four through eight are eligible to register their schools to receive contest materials for a school-level Bee. Heads of home school associations may register to receive contest materials to arrange a Bee for their home school members. Keep in mind that there is a minimum participation requirement of six students from the eligible grade levels in a school-level Bee. Also, the contest materials may not be in the hands of relatives of a participating student at any time.

Principals may write a letter on school letterhead and enclose the registration fee of U.S. \$50 requesting that their school receive the contest materials. In their letter, principals may designate a teacher in the school to be the recipient of the materials. Heads of home school associations may register the same way on official letterhead, enclosing the \$50 fee. Mail the letter and registration fee (check or purchase order) to:

**National Geographic Bee
1145 17th Street NW
Washington, DC 20036**

Official registration normally ends **October 15** every year. The Beeline phone number—(202)828-6659—will give updates to any deadline extensions

that have been granted. Once registration is closed, it is closed to all. Once a school registers and is mailed a packet, there are no refunds. Schools may produce only one school Bee winner, so it is up to the school to register only once. Contest materials are sent in mid-November and the School-Level Bee is to be held between that time and January 14th.

The materials packet contains everything a school needs to participate in the competition including an instruction booklet with suggested procedures, question booklet, a medal to present to the one school winner, and the qualifying test that must be administered to the school winner. (This test determines the top scoring

one hundred student in each state who are invited to compete at the state-level competition. Individual scores are not released.

GENI then hosts the state-level bee the first Friday in April (required by the National Geographic) at IUPUI where state qualifiers compete in an oral competition. The state winner receives \$100 cash, a new globe from the National Geographic and an invitation to the National Geographic headquarters in late May to compete in the national finals for scholarships in the amount of

\$25,000, \$15,000 and \$10,000.

If you have questions, visit the NGS site at www.nationalgeographic.com/geographybee. They have redesigned the site and provide a "study corner" section with sample questions and bee resources. If you have any questions regarding the state-level competition, contact the GENI office. Kathy Kozenski is the Indiana State Bee Coordinator. April 1st is the date for all state-level bee competitions in 2005 and May 24-25 will be the dates for the national competition.

The National Geographic has an official study guide available for purchase. An additional resource is available online for prospective competitors. The finalists of the 2003 National Geographic Bee got together and created a wonderful site for students to explore at www.GeoBeeCentral.com. Visit the GENI website for coverage of past Indiana Bee competitions!

Source: National Geographic Society website.



Get Involved with the Third Annual Capitol Forum Indiana

Capitol Forum Indiana is a year-long, multi-state program in civic education that offers a unique opportunity for high school social studies teachers and their students to examine international issues through the lens of U.S. foreign policy. The centerpiece of the program, The Capitol Forum, takes place in the Spring when students and teachers gather in Indianapolis to thoughtfully deliberate on the role of the United States in world affairs.

Using interactive simulations and other materials developed by the Choices for the 21st Century Education Program, based at Brown University's Watson Institute for International Studies, student teams explore a range of viewpoints on U.S. foreign policy and consider related issues including the global economy, the environment, immigration, and the U.S. role in conflict. At the Capitol Forum, public officials are present to share their views and discuss issues of policy with students.



The program culminates in a balloting process that involves all students at participation schools. The results of these ballots are developed into a formal report that is shared with all elected public officials in Washington, D.C., the news media, and high schools in participating states.

Students quotes:

"Being able to debate in a professional setting on important political issues really sparked my interest...I loved voicing my opinions and views with others—and actually having my words matter."

"It isn't often that students get to talk about these things and even less often that we can talk to the people who make our policy."

For more information and an application to download, visit www.indiana.edu/~global/cfi. You can also contact the Project Coordinator, Julie Patterson at (812)855-1638 or judpatte@indiana.edu. An Introductory Evening Workshop is scheduled for October 20th. The experience includes free curricula and IU credit is available!

New Indiana GIS Education Road Show Series

The Indiana Geographic Information Council (IGIC), in collaboration with The Polis Center at IUPUI, is building on the success of its GIS Seminar Series by offering full day GIS education events at locations around the State of Indiana. These FREE events are intended to provide an opportunity for Geographic Information education—both for those interested in learning about the power of geographic information systems and for those existing GIS users that want to expand their knowledge in particular areas.

The first road show will take place in Richmond, Indiana on September 9, 2004 from 9 a.m. to 4:00 p.m. at 401 E Main Street in the county administration building/annex building. Participants may feel free to attend the entire day or only those parts of the day that interest them. Additional seminars will be scheduled over the next few months in other locations around the State. If you are interested in attending this event, please call (317) 274-2455 or send email to shelwils@iupui.edu. Attendance is free, but registration is required to ensure seating.

Agenda for the seminar in Wayne County follows:

9:00-9:15 – Introductions and Welcome

9:15-10:15 a.m. – GIS Concepts

This session will be particularly relevant to those individuals that are new to the world of GIS. It will review key terms and concepts that are frequently used by GIS professionals.

10:15-10:30 a.m. – Break

10:30 a.m.-Noon. – Applications of GIS—This session will introduce examples of how GIS can be used to address the needs of communities. Examples to be covered include applications of GIS in Emergency Management, Stormwater management, environmental applications, geocoding, and economic development. Funding opportunities will also be reviewed.

Noon to 1:00 p.m. – Lunch

1:00-2:00 p.m. – Photogrammetry and Remote Sensing—Topics to be addressed in this session will include an overview of aerial photography and the status of the statewide orthophotography project.

2:00-2:15 p.m. – Break

2:15-4:00 p.m. – Indiana Water Quality Atlas—This session will introduce the new Indiana Water Quality Atlas (IWQA). The IWQA is a Web-based interactive atlas of water quality related data.



Muslim Al-Idrisi and the Beginning of Scientific Geography

By Orvil Schlatter

The year was 1138 A.D. The place was the royal palace at Palermo, Sicily, and the participants were an unlikely pair: a Christian monarch and a Muslim scholar. The Muslim scholar, al-Idrisi was an Arab geographer born in 1099 A.D. in Ceurta, Morocco, across the strait from Spain. He had been educated in Cordoba, Spain in Islamic scholarly tradition. The monarch was King Roger II, son of a Norman-French soldier who had conquered Muslim-controlled Sicily. The King had been educated in the Christian tradition, but he also had Greek and Arab tutors. The topic of this unusual meeting was the creation of the first accurate and scientific map of the entire known world.

This mixture of two cultures had come at a time when Crusaders and Muslims were battling in the Holy Land and Mediterranean pirates of both faiths plundered each other's ships and ports. At the court of King Roger religious affiliation played a secondary role to the acquisition of knowledge. His court boasted a collection of philosophers, mathematicians, doctors, geographers and poets, which had no superior in Europe at the time. In the company of these scholars, the King spent much of his time.

By the time al-Idrisi had reached Palermo, he had become a leading expert in medicinal plants. He determined that little had been added to this field since the early Greeks and therefore, he collected plants and data on their medicinal effects and published a number of books. His names for drugs can be found in six languages: Syriac, Greek, Persian, Hindi, Latin and Berber. Because of his studies and collecting, he traveled the length of the Mediterranean Sea. His observations on these travels were the basis for books on geography. His wide-ranging interest was in the physical descriptions of areas, the climate, the economy and the cultural aspects of the territory. This may qualify him as the first scientific geographer.

To carry out the mission of mapping the known world, King Roger established an academy of geographers, with himself as director and al-Idrisi as permanent secretary. The King wanted to know the precise condition of every area under his rule, and of the world outside his boundaries. To create an accurate map and book, the academy dispatched scientific expedition to all areas especially those areas where little knowledge existed. Draftsmen and cartographers accompanied these expeditions so that a visual record of the countryside could be made. They were expected to investigate numerous aspects of each place: climate, rivers and lakes, mountains, coastal configurations and soil, roads, buildings, monuments, crops, crafts, imports, exports and marvels, cul-

ture, religion, customs and languages.

During this research, al-Idrisi and King Roger compared data, keeping the facts on which all could agree and throwing out all conflicting information. The process of collecting and assessing material took fifteen years. The King hardly let a day pass without conferring personally with geographers, studying accounts that disagreed, examining astronomical coordinates, tables and itineraries, poring over books and weighing divergent opinions.

Finally, the long preliminary study was finished and the task of map making began. A disk of silver eighty inches in diameter and weighing three hundred pounds was fabricated. According to al-Idrisi's own account, the disk had

incised lines marking the limits of the seven climates of the habitable world. Following sketches prepared by the academy, the silver-smiths



Al-Idrisi's World Map (oriented with south at top)

transferred the outlines of countries, oceans, rivers, gulf, and islands onto the silver disk. A book was prepared to accompany the map. This volume contained the material gathered by the geographers in their fifteen years of study. Al-Idrisi, the Muslim geographer gave the book to his Christian king and titled it *al-Kitab al Rujari* (Roger's Book).

Obviously, the map was not totally accurate and not all of the facts collected were true. However, the surprising conclusion was that in the Middle Ages, also known as the "Dark Ages," a Christian king and an Islamic scholar began what is believed to be the first systematic study of the earth. It may be, that in the year 1138 A.D. Geography, as a scientific discipline, was born.

Source: Frances Carney Gies, *"Al-Idrisi and Roger's Book"* Aramco Services Company 2004 <http://www.saudiaramcoworld.com>

What's Around Here?

By Chris Boylan

George Washington Community School, Indianapolis

Estimated Sessions: One or two 20-minute sessions

Grade Level: 6th and 7th grade special needs students

Purpose: This lesson is designed to work on basic map reading skills using a map and interpreting data from a table, created on SAVI.

Indiana Academic Standards:

Social Studies:

3.5.5 Use community resources – such as museums, libraries, historic buildings, and other landmarks – to gather cultural information about the community.

3.5.1 Give examples of how the local community is made up of many individuals, as well as many different groups.

English:

4.7.1 Ask thoughtful questions and respond orally to relevant questions with appropriate elaboration.

Objectives: The students will...

1. be able to identify basic symbols on a map,
2. be able to answer questions using a table, and
3. formulate two (2) questions from the materials given to them.

Materials Required:

- Attached Worksheets and map
- Internet access for advanced students/extensions

Background: Students should be familiar with the basic parts of a map. Either the map attached can be used for the exercises or the teacher can create their own map on the SAVI website. Please note, a large variety of maps can be created for ten counties by manipulating the data requested under the “sites, programs, and agencies” section (ie- banks, CDC’s, Community Centers, Hospitals, Libraries, Licensed Daycare Centers, Licensed Home Daycares, Places of Worship, Schools, United Way Agencies, WIC Clinics) and/or the scale of the map. Data is currently available for the following counties: Boone, Hamilton, Madison, Putnam, Hendricks, Marion, Hancock, Morgan, Johnson, Shelby, Brown.

Procedures:

1. Begin by reviewing basic parts of a map:
Title, Date, Legend, Scale, Directional Indicator (compass rose), Author
2. Hand out worksheets and map. Make sure students are clear that all of the information they need to answer the questions is on the map and table provided. They are to formulate a question of their own for the diagrams.
3. Roam around class to aid students and ask questions to establish understanding.

Assessment: Completed worksheets, discussion

Adaptations:

- Shorten/lengthen number of required responses.
- Allow for verbal responses to questions.
- Have students speculate on why the distribution exists like it does. For example, why are there so many banks in this relatively small area and yet only one school?
- Have students compare/contrast urban versus rural areas.
- More advanced students can explore the SAVI site and create their own maps.
- Have students calculate percentages from the table of data. For example, what percentage of the Hamilton County population is Hispanic?

Resources: <http://beta.savi.org>

NAME _____ CLASS _____

County Populations Based on 2000 Census Results

County	African-American Population	Caucasian Population	Hispanic Population	Total Population
Hamilton	2,806	172,475	2,911	182,740
Marion	207,964	606,502	33,290	860,454
Hendricks	1,162	100,664	1,591	104,093

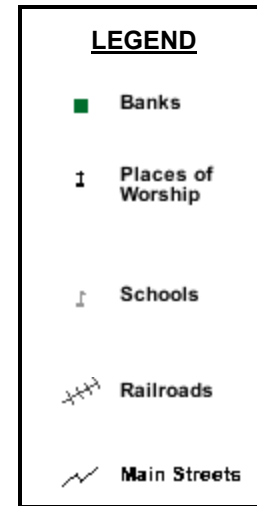
1. How many **African-American** people live in **Marion** County? _____
2. How many **Hispanic** people live in **Hamilton** County? _____
3. How many **Caucasian** people live in **Hendricks** County? _____
4. What **year's** data is used in this table? _____
5. What is the **total population** of Marion county? _____

Student Question:

BONUS:

What is the **total population** of all three counties?

NAME _____ CLASS _____



1. How many **Schools** are on this map? _____
2. How many **Banks** are on this map? _____
3. How many **Places of Worship** are on this map? _____
4. What can be found inside the “circle” on this map? _____
5. What runs through the very southeastern corner of the map? _____

Student Question:

BONUS:

What is another name for Maryland Street on the map above?

Tear The Continents

Adapted from an original lesson by Jean Marr.

Purpose: In order to gain a better understanding of Earth's continents, students will tear paper into representative continent shapes and configure them with world oceans through relative location, direction and latitude and longitude starting points.

Grade Level: K-3

National Geography Standards:

Standard 1, Standard 2, Standard 3

Indiana Social Studies Standards:

K.3.1; K.3.2; 1.3.1; 1.3.2; 2.3.1; 3.3.2

Materials Needed:

Blue and brown butcher paper or construction paper
Blank white paper
Atlases
String/yarn
Black markers
Tape
Bulletin board or wall space similar in size



Objectives:

The students will...

1. recognize the shape of the continents.
2. recognize the location of the continents with respect to each other and the Prime Meridian and the Equator.
3. identify the continents and major world oceans by name.

Background: Students should understand the differences between globes and maps.

Procedures:

1. Review the differences between globes and maps, and discuss how land and water is usually represented (colors) on both representations of the earth's surface.
2. Divide the students into groups of 3 or 4 and give each group an atlas, brown paper and blue paper. (Adaptation for special needs: give each group a blackline copy of each continent, specifically showing the outline they are to copy when they tear the brown paper. See related website below for blank outline maps)
3. Instruct students to refer to their atlas and "tear" the shapes of each continent from the brown paper. Have them concentrate on the shape, regardless of the size they make the continents. It is important they focus on shape first. If needed, you may want to list each of the continents they are to "tear" a shape for on the board and instruct them as to which page they would find an appropriate map for each continent. Be sure to avoid maps that are not conformal (distorts the shape of the continents).



- Once the group has each continent torn from the brown paper, ask them to arrange them on the blue piece of paper and draw a directional arrow somewhere on the edge of the blue paper. Remind them that north is usually at the top of a map and south at the bottom.

For more advanced students:

- Require the students to keep continent sizes as accurate as possible with respect to each other.
- Give each group a black marker and a white sheet of paper. They are to list each major Ocean on the white paper with the black marker given, and simply tear around each to use as labels around their continents.
- Once the students have their continents and ocean labels torn out, they are to place them on the blue piece of paper. (Do not have them use tape until after the next step.)
- Now give each group some yarn or string. Instruct them to use the string to label the starting point for both latitude and longitude (Equator and Prime Meridian). They may need to move the continents around a little.
- Lastly, have each group use their black marker to add a star to indicate their position on the globe.

Evaluation:

- Teacher observation of student participation
- Map created with required components
- Map quiz using either a blank world map or general outlines of the continents requiring students to label each continent (and oceans if more advanced).
- Worksheet requiring students to use their maps to answer questions like:
 - Which continents have the Equator/Prime Meridian running through them?
 - What continent lies directly south of Europe?
 - If you were flying directly east from Asia, what continent would you reach first?



Related Websites:

<http://www.cdli.ca/CITE/maps.htm> is an excellent site for blank outline maps. This site was created by a grade five teacher in Newfoundland, Canada. It also includes a printable continents and oceans map quiz.

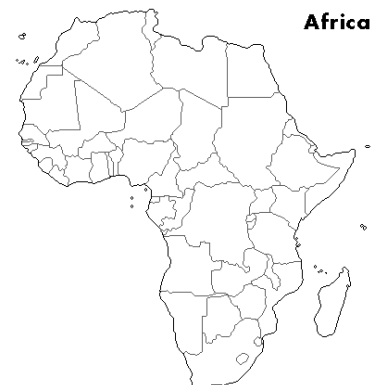
<http://geography.about.com/library/blank/blindex.htm> has blank outline maps of the countries and continents of the world.

www.geographic.org/maps/maps.html has an extensive list of maps available, including coloring maps for continents and the world.

www.makingfriends.com/earth_tissue.htm has an activity for making a representation of the earth using wax paper, tissue paper and liquid starch. It includes a pattern and instructions.

Extensions:

- This exercise can be done as a class as well and created on a larger scale on a bulletin board.
- Additional lines of latitude and longitude can be added (ie-tropics, home coordinates or lines).
- Hemisphere labels can also be added.
- Construct the world tissue map (see related website above).



DESIGN A STATE PARK



*By Kathy Arduini
John Strange Elementary School, Indianapolis*

Classroom sessions/estimated time: part of a four-week art program

Grade Level(s): Grade 4 but easily adaptable

Purpose:

Students will use good design principles to create a state park. They will take a trip to a park and they will use maps, keys, photos and landscape designs to start designing their own park. Students will link geography and art together. They will also understand that art and geography are vital in order to do this project.

National Geography Standards addressed:

Standards 1-4

Standards 14 and 15

Indiana Social Studies Academic Standards addressed: Geography

4.1 Describe and compare the physical characteristics of places at a variety of scales, local to global.

4.2 Describe and compare the human characteristics of places at a variety of scales, local to global.

4.3 Describe and explain the physical and human processes that shape the characteristics.

Art Standards addressed:

2.1 Make connections among the visual arts and other disciplines.

1.2 Understand and create techniques and processes, both two-dimensional and three-dimensionally to express visual ideas, feelings, and values through the use of art elements and principles.

Objectives:

Upon completion of this lesson, students will be able to...

1. Design a map of a park.
2. Make a key/legend.
3. Apply knowledge learned about human characteristics.
4. Apply knowledge learned about physical characteristics.
5. Apply art elements in their artwork.

Background:

Students will have basic understanding of mapping skills and will review maps with physical characteristics and human characteristics of the surrounding areas of Indianapolis.

Materials Required:

White poster board

Pencils

Markers,

Papier mache' pulp to make elevated areas on map

Photos

Blueprints of a map

Website of parks

Procedures:

1. The students will visit Holliday Park for a two-hour field trip. During this visit the students will have to answer a question/answer sheet concerning the physical characteristics and the human characteristics of the park. Any city park can be used. Simply create questions for that park that requires the students to observe/study both types of characteristics, and especially the consider the relationship between them.
2. After the trip (next class), students/teacher will compile their information on the board and large sheet of butcher paper.
3. Students will work in pairs to make a list of the important aspects that they feel are key to a good park and explain why.
4. Give each student the physical characteristics/human characteristics that can be added to their park. You may choose to allow the students to add their own creative aspects to their park, within reason. In other words, they need to understand you would not add a large roller coaster to a one-acre park.
5. Show examples of real parks on the visual presenter and through brochures from other local and/or state parks. Be sure to have students look at the key/legend and explain the importance of that map feature.
6. Have students make a list of the physical things their park will include (either a list from the teacher or what they have created themselves), such as bodies of water, rivers, landforms, trees, etc.
7. Instruct the students to create a rough sketch of their park.
8. Discuss the necessities of people visiting their park. Then have the students make a list of the human or cultural aspects of their park (again either from a list provided by the teacher or what they have created themselves), such as gate entrance, information/emergency assistance, picnic and restroom facilities, recreational swimming, trails, playgrounds, etc.
9. Instruct students to add the human aspects to their sketch. You may have students go back and add detail and color to their sketch to create a final product or have them use the sketch to draw a new map of the park they have created.
10. Make sure they add a key/legend and title for their park/map.
11. The exercise can be continued by asking students to write a short paragraph on what makes a good park and why they designed their park the way they did. Or, they could be required to create a promotional brochure for their park to attempt to draw visitors.

Assessment:

- Completed map (and list of human and physical aspects if not given by the teacher)
Were all of the required elements included (i.e.-is the key complete and does it help explain the map)?
Did they have an understanding of an appropriate location?
Did they create a park using the physical/human characteristics as instructed/listed?
Did they use their art elements and principles of design as explained by the teacher?
Is their map neat, logical and easy to read?
- Descriptive paragraph and/or park brochure
Is it appropriate and accurate with the map created?

Enrichment: Design a golf course, a swim park, a zoo, an amusement park or garden

Resources:

There are a number of websites on state parks, including:

www.in.gov/dnr/parklake for Indiana's state parks and reservoirs

www.indygov.org/eGov/City/DPR/home.htm for Indy Parks and Recreation

www.visitindiana.net/indparks.html for listings and links to any town or county that has a Parks and Recreation department.

www.inpra.org for the Indiana Park & Recreation Association



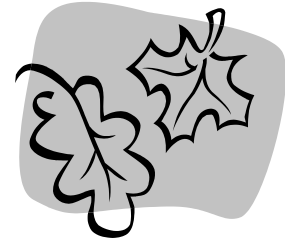
Resources

- **Geography of the 2004 Elections**, with some very tight local and national elections just around the corner, do not miss this opportunity to get your students involved. Find great, standards-driven resources online at www.c-span.org/classroom/enroll.
 - Connect your students with their world. **Curriculum resources** from Choices Education Program, Brown University, Thomas J. Watson Jr. Institute for International Studies, Box 1948, Providence, RI 02912. www.choices.edu
 - **K-12 East Asian Connection**. East Asian Studies Center, Indiana University, Memorial Hall West 207, Bloomington, IN 47405. www.indiana.edu/~easc
 - **CultureGrams**-People, the World, You. Get a world of perspective with concise, reliable, up-to-date CultureGrams. www.culturegrams.com/demo
 - **Holy Land, Whose Land?** In this book, Dorothy Drummond draws together the complex and volatile mix of history, religion, and politics that fuel the Israeli/Palestinian conflict. www.educarepress.com
 - **Indiana State Museum Teacher Resource Center** showcases all of the educational resources and programs available through the Museum's Teacher and Student Programs. www.indianamuseum.org
 - **Thorntown Heritage Museum** helps teachers with "Social Studies Outside the Box." Make local connections and add the snap and sizzle of GPS/GIS to social studies, language arts, science, art and more! www.countyhistory.com
 - **Resources for Earth Science and Geography Instruction** (RESGI) website has been updated with a new version. It now has a search capability and contains over 1,000 teaching resources organized alphabetically. <http://webs.cmich.edu/resgi/>
 - **Our Earth as Art**—Here you can view our planet through the beautiful images taken by the Landsat-7 satellite, and most recently, the Terra Satellite's Advanced Spaceborne Thermal Emission and Reflection Radiometer. <http://landsat.gsfc.nasa.gov/earthasart/>
 - **Water Resources of the United States**, USGS, this is a premier gateway that consolidates information relating to water resources and water quality issues. Peruse by state real time stream flow data, historical stream flow records, ground water depths, water use rates, and water quality. <http://water.usgs.gov/>
 - **Interactive Mars Habitat**, exploremarsnow.org, using Flash-enabled graphics presents a vision of what a Martian base will look like and presents the engineering requirements to maintain human presence on the Red Planet. Descriptions and images of the galley, bunks, greenhouse, pressurized rovers and more.
 - **Strange Science**—an overview of interesting steps leading up to the knowledge we have today of dinosaurs and paleontology in general. The site includes a 'goof gallery', which highlights mistakes made by earlier scientists, a timeline of major events in the history of paleontology and biology studies. <http://www.scienceandyou.org/outside/turnpike.mscott.html>
 - Track an F5 **tornado's path** across Oklahoma City, from USDA. See a view from space and note the curved blue line arching across the city. <http://www.fas.usda.gov/pecad2/highlights/99-05/okcity22.jpg>
 - The **Children's Book Council** is a not-for-profit association encouraging the use and enjoyment of children's books and related literacy materials. For more information and resources, visit www.cbcbooks.org.
- ### MAPS
- For an activity on making a "tissue" earth, visit www.makingfriends.com/earth_tissue.htm. The site includes instructions and pattern.
 - An excellent site for blank outline maps can be found at www.cdli.ca/CITE/maps.html. This site was created by a grade five teacher from Canada and includes a printable, one-page continents and oceans quiz.
 - For Blank outline maps of the world, countries and continents, visit the following site: <http://geography.about.com/library/blank/blxindex.htm>.
 - For extensive international information visit the following, www.geographic.org. You will find everything from climate to flags, maps, country codes and airports. The country details include facts, history, geography, population, government, economy, rank by land area and population, and more.
 - **George F. Cram Company** is an Indiana-based company that supports education around the state. Visit www.georgefcram.com/education for great resources.
- ### PROFESSIONAL DEVELOPMENT
- **New Educational Multimedia Certificate**—UNVA's new Certificate prepares teachers to use popular new media in their classrooms. This certificate is awarded after successful completion of three online courses. For more information and registration links, visit www.masterylearningnetwork.com/newsletters/MMC2.html.
 - **Online graduate courses** for teachers can be found at www.coe.ohio-state.edu/mmerryfield. They also have extensive online modules of web, print, and media resources on Africa, East Asia, Latin America, the Middle East, Slavic and Eastern Europe.
 - **Student opportunity for development**: the 43rd US Senate Youth Program. www.ussenateyouth.org.



GeoFest 2004 - Spring Mill State Park October 8-9

Geography Action! 2004
"Cultural Connections"
Geography Awareness Week
November 16-22



**Get your school
registered for the
National Geographic
Bee by Oct. 15!
Details inside.**



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